

Appl. No. 10/383,439  
Attr. Docket No. AA496C  
Amdt. dated 1-21-2004  
Reply to Office Action of 7-21-2003  
Customer No. 27752

### REMARKS

Claims 1 – 10 are pending in the present application. No additional claim fees are believed necessary.

Currently, Claim 1 is further amended in order to clearly define R<sup>52</sup> as a hydrogen or an alkyl group having from about 1 to about 30 carbons. Support for this amendment can be found in the specification at page 3 lines 29-30.

Claims 1 and 10 have been further amended to further define that the hair conditioning composition is a leave-on composition. Support for this amendment can be found in the specification at page 57, line 4-5.

Claims 1 and 10 have been further amended to further define that the hair conditioning composition comprises a humectant comprising a polyethylene glycol having a molecular weight of up to about 1000. Support for this amendment is found in the specification at page 12, lines 5-7. Claim 3 has been cancelled as this matter has now been incorporated into Claim 1. No new matter has been added.

Claim 10 has been further amended to further define the present invention wherein the carboxylic acid/carboxylate copolymer is defined as an acrylic acid/alkyl acrylate copolymer with a specified formula. Support for this amendment is found in the Specification, page 4, lines 11-20. Further the visible particle of the present invention has been specifically defined as a particle which can be distinctively detected as an individual particle by the naked eye and which is stable in the present composition. Support for this amendment is found in the Specification, page 5, and lines 9-12. Further, the aqueous carrier of Claim 1 has been specifically defined as being selected from water and water solutions of lower alcohols. Support for this amendment can be found in the Specification, page 9, lines 13-14.

With regards to the objection to Claims 5 and 9 under 35 U.S.C. 112, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. The objection is based on the term "Additional" in Claims 5 and 9 for having no antecedent in Claim 1 and Claims 1, 3-8 respectively. However, Applicants would like to kindly point out that the Specification clearly defines the specific terms "Additional Viscosity Modifier" and "Additional Conditioning Agent" in

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the specification on pages 18, lines 34 to page 20 line 33 and page 37, lines 26 to page 38, line 2, respectively. For example, the specification states on page 37: "The compositions of the present invention may further comprise an additional conditioning agent selected from the group consisting of high melting point compounds, cationic surfactants, high molecular weight ester oils, cationic polymers, additional oily compounds, and mixtures thereof. Additional conditioning agents are selected according to the compatibility with other components, and the desired characteristic of the product. For example, components of cationic nature will be included in an amount which would not cause separation in view of the essential components of anionic and/or amphoteric nature." Therefore, one of skill of art would clearly understand these terms and their use the claim language. Applicants kindly request reconsideration.

It is believed these changes do not involve any introduction of new matter. Consequently, entry of these changes is believed to be in order and is respectfully requested.

**(A) 35 U.S.C. § 102(e)**

Claims 1, 3, 4 and 5 are rejected under 35 U.S.C. § 102(e) as being anticipated by Hitchen (U.S. 6,106,816).

Hitchen relates to shampoo compositions. Hitchen discloses an aqueous shampoo composition comprising, in addition to water, a surfactant chosen from anionic, nonionic, or amphoteric surfactants, and mixtures thereof, an insoluble, nonvolatile silicone, a suspending polymer chosen from polyacrylic acid, cross-linked polymers of acrylic acid, copolymers of acrylic acid with a hydrophobic monomer, copolymers of carboxylic acid – containing monomers and acrylic esters, cross-linked copolymers of acrylic acid and acrylate esters, and heteropolysaccharide gums, and titanium dioxide coated mica.

The Examiner has asserted that Hitchen teaches shampoo compositions comprising copolymers of carboxylic acid such as Carbopol-1342, and aqueous carrier (water), visible particles, namely titanium coated mica, viscosity modifiers such as thickeners, and a silicon compound. The Examiner further asserts that Hitches discloses propylene glycol (column 9, examples 8-11). Further, the Examiner asserts that Hitchen discloses cationic conditioning agents.

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However, Applicants kindly submit that Hitchen does not disclose a humectant comprising a polyethylene glycol having a molecular weight of up to about 1000, as now amended and required in the present invention. Examples 8-11 of Hitchen disclose propylene glycol only.

Applicants have surprisingly found that a humectant provides the leave-in-conditioner composition with conditioning benefits wherein a polyethylene glycol having a molecular weight of up to 1000, provides less stickiness when compared to low molecular weight humectants, such as propylene glycol, as disclosed by Hitchen. When compared to polyethylene glycols having a molecular weight higher than 1000, the present invention's humectant provides improved transparency and solubility.

Therefore, Hitchen does not disclose or anticipate the present invention. Applicants kindly request reconsideration and withdrawal of the 35 U.S.C. § 102(e) rejection.

(B) 35 U.S.C. § 103(a)

Claims 1-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hitchin (U.S. 6,106,816) in view of Karlen et al (U.S. 6,004,545) and Rath et al (U.S. 5,993,792).

The Examiner has asserted that while Hitchen teaches shampoo compositions comprising copolymers of carboxylic acid such as Carbopol 1342, an aqueous carrier, visible particles, viscosity modifiers, silicon compounds, propylene glycol and cationic conditioning agents, Hitchen does not teach an amphoteric conditioning polymer. The Examiner asserts that it would have been obvious to a person of skill in the art to add Merquat Plus 3300 to the composition of Hitchen to achieve the beneficial effect of an amphoteric conditioner in view of Karlen et al and to further, it would have been obvious to a person of skill in the art to include the other claimed "further comprising" ingredients in the obvious composition of Hitchen in view of Karlen et al to achieve the extra beneficial effect of these additives in view of Rath et al. Applicants respectfully traverse this assertion.

In order to establish a prima facie cast of obviousness, the Examiner must show that (1) there is some suggestion or motivation, either in the references themselves or in

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the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, (2) there is a reasonable expectation of success, and (3) all of the limitations of the claims are taught or suggested in the prior art (M.P.E.P. § 2143).

Applicant respectfully traverses this obvious rejection as Hitchen in view of Karlen et al and Rath et al does not establish a prima facie case of obviousness because they do not teach or suggest all of the Applicant's claim limitations.

In particular, Hitchen does not disclose a humectant comprising a polyethylene glycol having a molecular weight of up to about 1000, as now amended and required in the present invention. Further, none of the references, alone or in combination teach a humectant comprising a polyethylene glycol having a molecular weight of up to about 1000.

Therefore, there is no prima facie case of obviousness since Hitchen, either alone or when combined Karlen et al and Rath et al, teach or suggest all of the Applicant's claim limitations with regard to the claimed requirement of a humectant comprising a polyethylene glycol having a molecular weight of up to about 1000.

In light of the arguments presented herein, it is respectfully submitted that the rejection of the claims under 35 U.S.C. § 103(a) be withdrawn.

Further, the broad teaching in Hitchen disclosing the use of cationic polymeric conditioning agents in shampoo compositions and the further general teaching in Rath et al of the use of optical brighteners, herbal extracts and UV absorbers would not lead one of skill in the art to the leave-in conditioners of the present invention.

Specifically, Hitchen discloses shampoo compositions comprising cationic polymeric conditioning agents such as Merquat 100 and Merquat 550 (column 4, line 37 and column 5, lines 8-10). The Examiner has asserted that it would have been prima facie obvious to a person of skill in the art to add Merquat 100 to the composition of Karlen et al to achieve the beneficial effect of an additional conditioning agent in view of Hitchen. However, Applicants have taught, as found on page 38, lines 1-6, that additional conditioning agents are selected according to the compatibility with other components, and the desired characteristic of the product. For example, components of cationic nature

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(emphasis added), will be included in an amount which would not cause separation in view of the essential components of anionic and amphoteric nature. Applicants have found cationic polymers, such as Merquat 100 and Merquat 550 can negatively interact with an acrylic acid/alkyl acrylate copolymers, as defined in the present invention. Applicants have found that the amphoteric conditioning polymers have better compatibility with the acrylic acid/alkyl acrylate copolymers, than do the cationic polymers such as Merquat 100 and Merquat 550, as disclosed by Hitchen. Therefore, one of skill in the art would not be led to the teachings of Hitchen due to the cationic nature of the conditioning agents which can negatively interact with acrylic acid/alkyl acrylate copolymers.

Therefore, one of ordinary skill in the art would not have been lead to modify the compositions of Hitchen by adding or combining the "further comprising" ingredients as disclosed in Karlen et al and Rath et al. Further, one of skill in the art would not be lead by the teaching of Hitchen to combine the teachings of Karlan et al or Rath et al because one would not have a reasonable expectation to succeed in achieving or improving the properties of the composition.

In summary, Hitchen in view of Karlan et al and Rath et al does not establish a prima facie case of obviousness. Namely, there is no prima face case of obviousness since Hitchen, either alone or when combined Karlen et al and Rath et al, does not teach or suggest all of the Applicant's claim limitations with regard to the claimed requirement of a humectant comprising a polyethylene glycol having a molecular weight of up to about 1000.

Further, one of skill in the art would not be lead by the teaching of Hitchen to combine the teachings of Karlan et al or Rath et al because one would not have a reasonable expectation to succeed in achieving or improving the properties of the composition, as described above.

Therefore, in light of the arguments presented herein, it is respectfully submitted that the rejection of the claims under 35 U.S.C. § 103(a) be withdrawn.

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### Conclusions

In light of the above remarks, it is requested that the Examiner reconsider and withdraw the claim objections and rejection under 102(e) and 103(a). Early and favorable action in the case is respectfully requested.

Applicants have made an earnest effort to place their application in proper form and distinguish their claimed invention from the prior art which was applied in the February 3, 2005, Final Office Action. WHEREFORE, consideration of this application, amendments filed herein, withdrawal of the rejections under 35 U.S.C § 102(e) and 103(a), and allowance of Claims 1-10 are respectfully requested.

Respectfully submitted,  
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